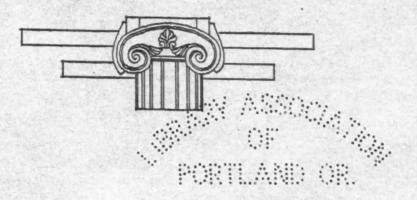
THE PACIFIC COAST ARCHITECT

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A-MONTHLY-JOURNAL-FOR-THE ARCHITECTURAL - INTERESTS OF THE PACIFIC COAST

PORTLAND

OFFICE OF PUBLICATION OREGON

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VOLUME 2

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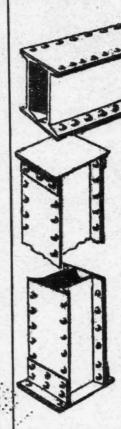
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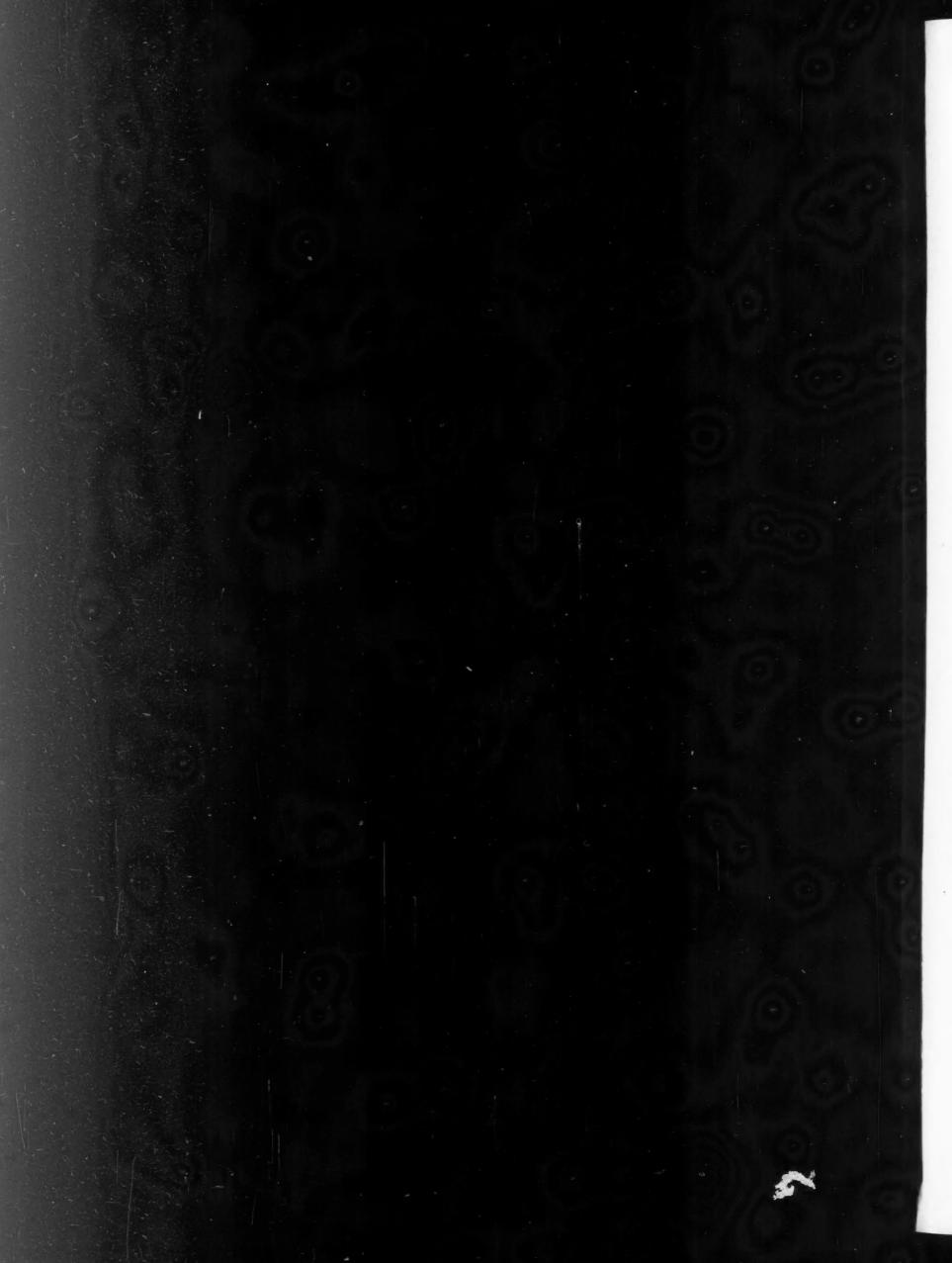
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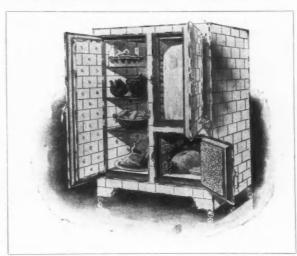
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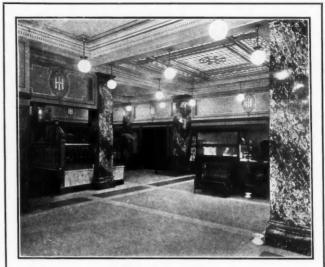


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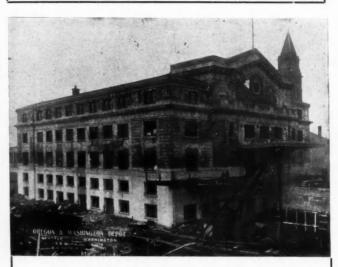
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The Pacific Coast Architect



VOLUME 2

PORTLAND, OREGON, OCTOBER 1911

NUMBER 1

COAST PUBLISHING COMPANY, PUBLISHERS

O THOMSON Editor

F, O. CREASEY, Treas.

L. J. FLYNN, Advertising Mgr.

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self addressed envelopes must accompany all such contributions.

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Current Comment

In Re the Auditorium site. We hate to do it but simply cannot, in view of the sharp criticism to which we were subjected for expressing our opinion as to the undesirability of the market site, refrain from saying, "We told you so."

m

We shall have the pleasure, in our next issue, of showing the prize renderings as well as the honorable mentions, if there be any, in the competition for the erection of the new Auditorium.

000

The cartoonist in a local paper recently gave a correct and most vivid portrayal of the Portland capitalist when asked to contribute to something which would prove of benefit to the city at large and these men in particular, if they could only be fitted with the proper kind of glasses. We refer to the effort to secure the establishment of a boat line to obtain at least a part of the trade which is now going to Seattle and San Francisco. We believe in boosting, first, last and all the time, but we are forced to the conclusion, harsh as it may seem, that a few first class funerals would work a miracle in the frowth of the fairest, and to be greatest city on the Pacific Coast.

S

Portland is a city of sub-divisions. The inhabitants live in the suburbs, not in the city proper. Why? Because some of the men referred to above are asking prohibitive prices for acres and acres of land within the near down-town residence district. With the imitation car service to which we seem to have fallen heir life is a burden to the man of moderate income, and Portland is stunted in the growth which is hers by right of location and everything else which nature has so bountifully showered upon her.

And while we are on this subject we want to say that many of the landlords of the main retail thoroughfares are becoming altogether too avaricious. The retailers cannot stand the tremendous strain in their rent account and slow but sure they are moving away from the clutches of the most hungry. Some day, if the Creator is not good in the meantime, they will awake when it is too late.

00

Of course we understand and thoroughly appreciate this is treason; in the minds of some of our very good supporters, but we have had this on our system for so long we simply had to get rid of it. At the same time we appreciate the fact that we are firing far above the heads of those we would like to reach.

SON

And with it all, Portland goes "building on." A gain of 13 per cent, lucky thirteen, over the first nine months of last year, is a record of which we may well feel proud. Just think what would happen if—. But what's the use, time will adjust these handicaps under which we are making such glorious headway. Then, look out Seattle, San Francisco, and the rest of our sister cities. There will be nothing left but the shouting.

We Are Growing

Six short months ago we published the initial number of the Pacific Coast Architect. In spite of the efforts of our well (?) wishers to the contrary we have grown in advertising patronage and circulation in leaps and bounds until with this issue we can modestly claim that we are

becoming a national proposition.

Following a postal card campaign among the architects of the entire country for subscriptions, we have added over a hundred subscribers to our list. Over one hundred architects were interested enough in what we of the coast are building to send in their subscriptions to our magazine, unsight, unseen—on the strength of a penny postal. These subscriptions come from the States of Minnesota, Wisconsin, Michigan, Ohio, New York, Maine, Massachusetts, Missouri, Tennessee, Florida, Louisiana, Texas, Nebraska, Utah and Jowa

In the meantime we have not been unmindful of our own territory and sincerely believe that no publication of its kind has ever so thoroughly covered the coast states, including Montana, Idaho and British Columbia, as we are

We are continuing the good work. We are becoming a national publication.

Cost of Concrete Houses

What is to be regretted in the development of concrete for house building is a seemingly erroneous idea as to cost. A "poured concrete house" at a remarkably low cost caught the fancy of the American public, and it seems as though everybody wants a concrete house, and-which is to be regretted-that they want it for next to nothing. When constructing engineers will make a specialty of house construction, fully equipped with interchangeable form out-fits (either metal or wood) and when standards have been more fully established, the very low cost concrete house will

It will come, but an earnest and united effort is necessary to bring it about. As Prof. Woolson said in his discussion of concrete as a fire-resisting material, we can only continue to patiently labor along lines we know to be right. The campaign of education, the change for the better of building requirements, and a better knowledge of concrete and its handling will bring to us a more economical

structure.

In the meantime it is best not to make any claims about concrete for residence purposes, especially as regards cost, that are not based on actual experience. The problem of the small house at a low cost is for the mechanical engineer to solve. Concrete itself, plain or reinforced is, per cubic foot, a low-cost material. Equipment will be designed embodying forms which are readily adapted for any position, and methods of running concrete much cheaper than at present; or, as is being done already, factories or stone "foundries" at centrally located points, will deliver units for speedy and economical erection.

We believe in concrete. It is taxing our American skill and ingenuity to keep up with and apply its wonderful possibilities. In the meantime, the concrete house is low in cost, comparing more than favorably with any other construction, and offering the best value for money expended, but it is not "miraculously cheap," and any attempts to make it appear so, only harm its use.—Cement Age.

Hollow Block Silo

A vitrified clay block silo, built upon Meadowview farm, owned by A. P. Grout, near Winchester, Ill., in September, 1909, was immediately filled with ensilage and has proved a wonderful success since that time, showing no cracks.

This silo is 12 feet inside diameter, 40 feet high and has a capacity for 100 tons of ensilage. The bottom is 8 feet in the ground upon 10 inches of cement, which was poured in a hole 15 feet in diameter. Thirty-eight blocks are required for one course, and 53 courses will carry it to a height of 40 feet. This calls for, after deducting eight blocks for each of the six openings, 1996 blocks.

Hollow spaces in the blocks and the spaces between were filled with concrete and slightly tamped to fill all crevices. The silo was reinforced with two No. 9 galvanized wires placed in the grooves left for the purpose in the top of each course, and these wires are connected by short wires of the same size securely fastened to the horizontal wires above and below at a number of places. The openings are 24x36 In making this silo 70 sacks of cement were used. No cost was kept of sand and gravel, as they were obtained from a creek bed on the farm. The blocks cost Mr. Grout 10 cents each, f. o. b. White Hall. The inner surface is hard and smooth and impervious to moisture and

Mr. Grout is prominent in the work of the Illinois Farmers' Institute, and that organization, which is interested in the promotion of silos, together with other phases of scientific agriculture, will urge upon the farmers of the State the use of the cheaply constructed and perfectly satisfactory vitrified clay block silo.

Fair Buildings Begun

San Diego, Cal.—One of the most important events of the Summer on the Pacific Coast was the visit of John Barrett, personal representative of President Taft to San Diego, where he turned the first spadeful of earth for the

Panama-California Exposition, July 19.

In Balboa Park, where the exposition is to be built, a special stand had been erected. Flags of all the nations of Central and South America, of the United States, and the President's flag were released by President Taft himself, who pressed a key in the White House at Washington at 7 o'clock Washington time, 4 o'clock San Diego time. As the buzzer on the stand at Balboa Park began to sound, Mr. Barrett suspended his address, and in company with Governors and representatives of Governors of Pacific Coast States, he took from Acting Director General Joseph W. Sefton a silver spade and thrusting it into the ground turned over a spadeful of earth. Others followed in order of their official precedence.

The ceremony began a four-day celebration that terprinated in the great Mission pageant, when for the first time in history all the missions of California were shown in one grand picture, the most elaborate and beautiful ever

seen on the Pacific Coast.

The celebration was an earnest of what the Panama-California Exposition is to be, its projectors intending to make it the most elaborate and beautiful exposition that has ever been built. It will make an especial appeal to the countries of Latin America and to the great Pacific Coast and the southwestern portion of the United States.

Active construction work on the first building, the administration building, to be a permanent affair, has been started. The managers expect to occupy the building by the

1st of January, 1912.

Guinea Pigs as Lawn Mowers

There was some good news during the past month in the consular reports from abroad. Good news, especially for pushers of lawn mowers who may be tired and weary from overwork, may be suffering from excessive heat, or possessed of the germs of laziness until they do not enjoy pushing the festive mower. The good news is in the report that the English have discovered that guinea pigs make successful lawn mowers.

Now who will ever call the English slow again? Slow either in point of humor or inventive genius. It is reported as a curious, but successful experiment made on private lawns in Kent, the idea being the novel one of substituting the guinea pigs for the lawn mower and the weed killer. It is said that a low wire barrier is arranged around the lawn and into the enclosure are turned guinea pigs and at once they attack the worst weeds—the plantains first, then the dandelions and the daisies. When they finish these they proceed to the grass and when this is finished it looks like the lawn has been cut with the closest machine. It is said also that the persistent cutting of the weeds by the guinea pigs kill them off, but they do not harm the grass, simply keep it mowed down.

It all sounds too good to be true, but wide circulation of this idea will probably beget enough belief inspired by hope that it will create an active demand for guinea pigs.

Site of the 'Frisco Exposition

The site finally decided upon for the location of the Panama-Pacific Exposition buildings is a happy combination of the three different sites contemplated, the San Francisco water front, the Harbor View district and Golden Gate Park—the commission has pleased everybody and has provided a scheme of boulevards, parks and buildings that presents untold possibilities for the architect and the landscape artist. Heretofore world's fairs have been massed into one section, so it will be something of a novelty to come to San Francisco and visit an exposition that embraces two-thirds of the city. A boulevard along the water-front will connect the several sites, and an intermural railroad, which will run along the south sides of Harbor View and the Presidio and then break off, skirting Lincoln Park and running through the Richmond district to Golden Gate Park, will afford still further access to the different points of interest.

The various features of the exposition grounds will be distributed as follows, according to the ten ative plans under consideration:

Harbor View—Of the territory bounded by Fort Mason, Lombard street, the Presidio and the bay front it is proposed to utilize between 250 and 300 acres. Here will be located such heavy exhibits as the transportation (locomotive) machinery, and, perhaps, the manufacturers' building; also the concessions and other features that will constitute the night life of the exposition. It is not proposed to do any filling in at the water front, but to construct there a yacht harbor, an aquatic park and other water-front features of the exposition. An aquarium is suggested for the present site of the Fulton Iron Works.

The Presidio—It is expected that the United States Government will erect here its Government buildings and exhibits, which, it is suggested, could be afterward used for division headquarters.

Lincoln Park—Lincoln Park is to be devoted to scenic features, and for that purpose improved and beautified. A giant commemorative statue at the summit, commanding the entrance to the harbor, is contemplated. Picturesque cafes and gardens are to be located here.

Connecting Lincoln Park with Golden Gate Park it is proposed to utilize some 200 acres of land in the Richmond district. Here will be located the foreign, state and county buildings and the horticultural, electrical and other exhibits.

Golden Gate Park—Golden Gate Park is reserved for the construction of only permanent features that are calculated to add to its attractiveness without destroying any of its natural beauty. Here are to be located the museum and art gallery, also Japanese and Chinese gardens, fountains and statuary. It is proposed to make the stadium the finest in the world and to build a coliseum around it. Another feature will be a miniature Panama Canal connecting the lakes. Only the section west of Twentieth avenue to be used for exposition purposes.

for exposition purposes.

Telegraph Hill—It is proposed to commemorate the use to which Telegraph Hill was put in early days by erecting thereon a large wireless station. The hill is to be terraced and a permanent observatory erected on the city park.

Other Features—The ferry at the foot of Market street is to be made the entrance to exposition city. There will be a grand court and, possibly, viaducts to conduct passengers from either side of Market street. Market street is to be improved and beautified; also Van Ness avenue. An auditorium or convention hall is designed for Van Ness avenue at Market street.

The main entrance to the exposition grounds will be located near Fort Mason, with others at Lincoln and Golden Gate Parks.

Another Skyscraper for New York

With the exception of the Eiffel tower, in Paris, the new Woolworth building at the west side of Broadway, between Park place and Barclay street, New York, of which Cass Gilbert is the architect, will be the tallest structure in the world. It will be 45 stories high.

According to the specifications, the Woolworth building will measure 750 feet from the door of the cupola down to the street level, and will contain more than 20,000 tons of steel girders. The cost of the building will be more than \$7,500,000. The main structure will be 29 stories high, and will measure 152.1 feet on Broadway, 197.1 feet on Park place, and 192.6 feet on Barclay street. The main structure will be two stories higher on Park place and Barclay street than on Broadway.

One of the principal features of the building will be a tower, which will rise from the main structure to a further height of 366 feet. It will be 26 stories high, and 86 feet wide and 84 feet deep. On the top of this will be an electric light. On the 54th story will be the observatory. The first story on the street is designed for stores and an arcade, with openings on Broadway, Park place and Barclay street. The banking floor and mezzanine story on the Park place side will be occupied by the Irving National Exchange bank, and in the basement will be a safe deposit vault, a restaurant, and a barber shop equipped with a swimming tank. The machinery, cold storage, refrigerating plant, power plant, electric generators, filtration plant, and other mechanical equipment will be placed in the sub-basement.

There will be four self-containing stairways, which will run from the top of the tower to the streets. These will be separated from the corridors and offices by fireproof walls and wire-glass doors. They are expected to make the stairs not only fireproof but smokeproof as well. There will also be an outside stairway, which will be built in the court, accessible from the corridors on each wing. The elevators will also be inclosed with iron and wire-glass doors. There are to be 34 lifts for passenger service, 24 of which will be located near the Broadway entrance, arranged in four groups of six each. Sixteen elevators will be of the high-speed type, and six of these will run to the 30th floor, six to the 41st and four to the 51st floor. The cupola will be reached by way of a spiral stairway.

The total cubical contents of the Woolworth building, measured from the top of the caissons, execeds 13,200,000 cubic feet. The caissons extend down to and are embedded upon, the solid rock from 110 feet to 120 feet below the level of the sidewalk.

The exterior of the building will be of stone and terra cotta, and it is stated that the design will be a combination of the Italian, French and modern renaissance throughout the main part, with Gothic steeples at the roof of the main structure.

Origin of Portland Cement

"What's this?" asked the city editor, glaring at the reporter. "Here you have in your story, 'The wall was built of Portland cement.' After this cut out the word 'Portland.' We don't want to advertise any particular brand of cement."

"It is none of your business to think anything. You are wrong, besides. It means Portland, Oregon, and the West must pay for all its advertising in this sheet or I'll know the reason why."—Eastern Exchange.

One Architect's Method of Dealing with Grafters

Scott N. Hughes gives an interesting account of the life of William Le Baron Jenney, the architect who died recently in California. It is instructive in many ways as to the ver perplexing problem of how best to deal with the would-be grafter and briber. A portion of the article is as follows:

Jenney despised worse than anything the grafter, and his manner of dealing with that type of man was effective.

One day Jenney was in his private office when a man who wanted to provide certain materials for a building then under construction came in and approached John Ewen, then a "cub" in Jenney's office, with a flagrant bribe offer. He offered Mr. Ewen \$50 if his material was used.

Mr. Ewen was seized with an inspiration. Instead of throwing the man out of the office, he said: "Mr. Jenney always handles that end of the business. Go in and see him." Then he awaited the explosion.

The man innocently approached Mr. Jenney and made the proposition.

"Sit down a moment," said Jenney, quietly. A moment later he looked up and said: "Young man, are you new in the business?"

"Yes, sir; I'm just starting. I want to get in right. My stuff is good, and I want a chance.'

"Well," said Mr. Jenney, "there are two ways to do business. If you want to do the best kind of business, with the best firms, don't do as you have done today. I have no doubt that is the way to do business with some firms. If you are after that class of business, that is the proper way to get it. But if you want the best business don't approach any one as you have me. I'll give you the contract at your figures. If you can afford to give me \$50, you can afford to knock \$50 off the price to the owner. Let's reduce your figures \$50 and give the builder the benefit.'

The man agreed. He learned his lesson well, and he did business with Mr. Jenney for years. When Mr. Jenney died this man testified that it was that one business lesson that made him realize that the only way to do business is to do it straight.

When Mr. Jenney dismissed the man that day after signing agreements he stepped out smiling to Ewen and remarked: "Thought you'd have some fun with me, eh?"

Another and severer lesson he administered to a big contractor down town. This man was prominent socially, financially, and in religious circles, and through Jenney he got the contract for a skyscraper down town. One day, while the building was in course of construction, he entered Mr. Jenney's office and handed him a check. "What's this for?" asked M. Jenney.

"It's the usual 10 per cent of the first payment-your share," he added, significantly.

Mr. Jenney took the check, chatted for a time with

the man, and finally went into the workroom.
"What's the amount of that contract?" he asked Mr. Mundie, his partner. Mundie told him.

Jenney figured for a moment, muttered, "Yes, the amount is correct," and then he retired to his private office and endorsed the check over to the owner of the building.

Nothing more was heard of the matter until the end of the month, when the crooked contractor received from his bank a check endorsed both by Mr. Jenney and the owner of the building.

There was nothing for him to do but to take his medicine. He appeared in Jenney's office, probably expecting to be flaved for his tactics, but nothing of that sort happened. Mr. Jenney remarked:

"I am extremely glad to know that you can afford to make the lowest bid on a building and give the owner 10 per cent back and still make money on it, but don't you think it would be more businesslike just to subtract 10 per cent from the total contract price and save all this red tape by sending the check to me and having me endorse it over to the owner?

The contractor humbly admitted that it was.

There was not a word of condemnation or reproof, and only a few who learned of it from the owner ever knew of the occurrence.

Mr. Jenney did not cast out that contractor, but continued to do business with him. And when Mr. Jenney built his own home he gave a contract for part of the material to this man-and the man skinned him.-Architect and Engineer.

New Theatre Built Like Telescope

Dresden, Sept. 15.—A wonderful theatre, opera house and circus arena combined, is springing into existence in Dresden under the auspices of the Saxon ministers of education and finance. In this marvelous building Caruso will be able to sing before 5000 people. Mark Antony will be able to address an audience of 4000 over the heads of 1000 Roman citizens, and, owing to the vast seating accommodation, Wagner, on a most magnificent scale, may be heard for 35 cents a head.

IS AMPHITHEATER.

The architect is responsible for the building, which is to make all this possible, is Herr Stosch Sorrasani, who has had vast experience in the building of coliseums and arenas. For the new building the Roman amphitheatre also forms the ground scheme; but at one side of the vast arena, with its tiers of seats, situated eccentrically like a smaller circle just within the circumference of a larger circle, an enormous dome thirty-six yards in diameter is being built.

Beneath this dome will be an ordinary theatre stage with all the usual equipment, while a hidden orchestra will divide the front of the stage from the arena floor. Thus, one day the open ring may be occupied by the tumbling clowns and performing elephants of the circus. The next day the arena floor may be sunk a few inches by hydraulic machinery, the fauteuils be extended right across to the orchestra, and Wagner opera may be played before 5000 people.

FLOOR SINKS AGAIN.

As soon as Lohengrin and his swan have disappeared, the fauteuils can be cleared away and the arena floor sunk to its greatest depth, from which a magnificent tier of terraced steps will rise to the highest point of the stage. Here the singers and musicians of the Ninth Symphony can be provided with an ideal resting place, or Mark Antony, from the steps of the capitol on the stage itself, can look down over all Rome to the outside limits of the arena floor.

The magnificent possibilities of this mountain-like show place have induced Herr Reinhardt, the famous organizer of pageants, to join forces with Herr Stosch Sorrasani, and Dresden in the future will witness some of the most colossal of spectacular productions. For instance, the three-storied "Faust"-heaven, earth and hell-will be produced here on a scale which has hitherto been impossible.

Personal Mention

Architect Robert F. Tegen, Swetland Building, was a recent visitor to Medford in connection with the hospital being erected there.

Martin Schacht has returned from an extended business trip to San Francisco.

Goodrich & Goodrich have been enjoying a visit from their mother, who resides in New York.

H. A. Whitney, of Whidden & Lewis, has returned from a month's trip in the East, stopping at Chicago, Detroit, Cleveland, Youngstown and Winona, Minn.

The firm of Kroner & Henn has dissolved partnership by mutual consent. Mr. Kroner will continue the office in the Worcester Building, while Mr. Henn will seek quarters elsewhere.

G. C. Nickerson, who installed the local office of the Western Building Material Co., October 1, 1907, and who has been their agent ever since, will take over the office of the Henry Cowell Lime & Cement Co., on November 1.

Walter Claussen, of Claussen & Claussen, has returned from a two weeks' vacation spent at Tillamook.

O. L. Broline has closed his office in the Board of Trade Building and has returned to his former home at Kingsbury, California, where he will practice during the winter.

R. E. Heine has returned from an extended trip to San Francisco.

Waldo F. Stewart, formerly located in the Spalding g, has become financially interested in the Newberg Brick & Tile Co., and will act in the capacity of assistant to Manager Rogers.

Willcox & Sayward, Central Building, Seattle, have completed plans for the erection of a general hospital to be built at Pangkiachwang, Shantung, China.

Potter & Merrill, 219 Provident Building, Tacoma, have

moved to 318 in the same building. W. G. McPherson, of the W. G. McPherson Company, was the first public spirited citizen to offer a subscription of \$1000 toward the operation of a boat line between Portland and Alaska.

N. J. Greening, formerly of Chicago, has succeeded O. J. Blum as local manager of the Brunswick-Balke-Collender Mr. Blum will represent the company on the road.

Mayor Rushlight has appointed Guy Thornton and A. S. Lotspeich deputies in the office of the Building Inspector. J. M. Nickum, of Nickum & Kelly, died recently at San Diego, where he had gone for his health.

Albert Held, of Spokane, has been named a member of

the City Park Board of that place.

E. M. Wingate, formerly Mayor of The Dalles, has moved to Portland and will erect a home in the spring.

Emmett Jones has succeeded G. C. Nickerson as local

agent of the Western Building Material Co.

In our last issue we inadvertently credited the New York office of Howells & Stokes with having prepared the second prize renderings in the competition for the erection of the State Capitol Buildings at Olympia. As a matter of fact, the work was performed at both the Seattle and New York offices, and credit should have been given in the cap-

Among the prominent cement manufacturers who recently held a conference in this city, were A. Coles, president of the Washington Portland Cement Company; Fred H. Muhs, of the Santa Cruz Cement Company; John Trainor, of the Riverside Portland Cement Company; J. Eden, of the Superior Portland Cement Company and P. Rochester, sales manager of the Washington Portland Cement Company.

J. W. Reid, of the firm of Reid Bros., San Francisco and Portland, was a recent visitor at the local office.

J. W. Shepherd, chemist for the Western Refining Company, has been confined to his home for the past two weeks with a sprained ankle.

E. E. Gilmer, of the Timms, Cress Company, is boasting the arrival of a brand new ten-pound boy.

Lifting Magnets—Invention That Has Changed Method of Handling Iron

The employment of lifting magnets has greatly simplified the handling of pig iron, steel and iron scrap, castings, rails and other miscellaneous magnetic matter.

The cost of handling the melting stock used by open hearth furnaces from cars to stock pile or from stock pile to the charging boxes has been reduced from approximately 8 cents a ton by hand methods to 2 cents a ton by the use of the lifting magnet in connection with suitable cranes.

It is a great convenience and saves time for the crane operator to be able to transfer an empty charging box to a new location without the help of a ground man or to be able to handle a heavy ingot or billet without waiting for chains or hooks to be attached. It is no unusual thing at some plants to unload 100,000 pounds of machine cast pig in thirty minutes with one magnet.

Rail butts and b'l'ets are difficult to handle by hand, but are easily taken care of by the magnet. At one plant handling billets from an indiscriminate pile the average of 790 lifts was 1710 pounds, and 675 tons were handled in thirteen hours and twenty minutes. At a puddling furnace 64,000 pounds of light bushling scrap were handled in twenty minutes.

It required four hours for a teamster and helper to load 1800 pounds of steel turnings from a lathe pit to a wagon. The turnings were long, heavy and tangled, from locomotive driving wheels. The magnet unloaded this wagon and put the turnings on the stock pile in three lifts. The time consumed was two and a half minutes.

Concrete Best for Elevator Enclosures

Recent disastrous fires in so-called fire-proof buildings have led to renewed consideration of the materials entering into their construction. Special attention is being paid to the general use of terra cotta or tile blocks for stairway and elevator enclosures, for which they are generally used. The material is conceded to be good for this purpose, but it does not work so satisfactorily when used for mounting fire doors at the necessary openings in such shafts. W. C. Robinson, of the Underwriters' Laboratories, chairman of the committee on fire protection covering for windows and door openings, of the National Fire Protection Association, declares as his personal opinion that tile and terra cotta blocks are not satisfactory for this purpose. He regards enclosures to vertical openings through buildings as ranking second only to fire walls in point of importance from the fire protection standpoint. Hollow building blocks of:en fail by the cracking away of the shells from the webs, due to the greater expansion of the shells. It is difficult to propmount fire doors at the opening of tile and terra cotta shafts, as if structural steel is used, it is apt to expand under heat and cause failing of the tile walls. Mr. Robinson favors the use of reinforced concrete or brick with ample reinforcement properly anchored at each floor, as the materials best suited for elevator enclosures in fire-proof build-

Wrecking Task Big When Crews Try Skyscraper

What is going to happen when the ground on which a modern, re-enforced concrete building stands becomes so valuable that the structure has to come down to make way for a larger and more modern building; that is to

say, a better income producer?

For instance, when Portland's population increases to 1,000,000 the block on which stands the Multnomah Hotel will in all probability be worth \$2,500,000 or more. When that time comes, the eight-story hotel will be too small a building for so valuable a lot, and will have to come down. The problem will be how to wreck it. So far as the record shows, such a building has never been wrecked for the reason that the oldest re-enforced concrete building in the country is less than 15 years old and the necessity for wrecking one of them has not arisen.

John C. Sneckenberg, in charge of the testing laboratory and unsafe division of the Brooklyn (N. Y.) Bureau of Buildings, says that the problem of destroying a reenforced concrete building will take the wreckers back to first principle, and that the problems faced by men of the stone age, when they wanted to make alterations in their cave homes, were the same that the wreckers of a modern re-enforced concrete house will have to struggle

with.

"It has resolved itself into a question of brute force," said Mr. Sneckenberg, "and a lot of brute force at that. It is infinitely more trouble to tear down a re-enforced concrete building than it is to build one, and while the skill is not required, it will be found, I believe, that the

cost will be very much more."

The use of modern re-enforced concrete for building construction goes back hardly 20 years, and there are few buildings of the most approved type that are 10 years old. For this reason, knowledge of the lasting qualities of cement can not be said to be complete, but from what we do know, the most ordinary house of brick or stone is at the peak of efficiency the moment it is completed. From that time it commences to deteriorate. The peak of efficiency in the case of a concrete house has not yet been determined; as concrete gets older, it becomes harder and more durable, provided, of course, the mixture was properly made.

The usual means of wrecking a house would not have the slightest effect on concrete. It is a case of a sledge,

hammer, drill and dynamite.

Real estate men are agreed that the march of progress and improvement makes the present day skyscraper a back number in 20 years, so fast do invention and new ideas follow one on another. Of course, there are exceptions to this rule. There are some of Portland's largest buildings that were built for the future and they will in all probability be standing 50 years hence; but some so-called skyscrapers here will doubtless be wrecked before 1930, and displaced by larger and finer structures. The brick and stone and terra cotta construction is easily removed with pick and shovel. Even the steel skeleton type of houses may be torn down without prohibitive cost, but to induce concrete to release its hold in the re-enforcing bands of steel is quite another matter. These bands of steel are wound in and out of the masses, crossing and recrossing and lapping over each other, thoroughly tangled like the hair in milady's coiffure and infinitely harder to separate.

Mr. Sneckenberg, the Brooklyn official, gives it as his opinion that a concrete building can only be torn down

by loosening the material with explosives and then breaking it free from the steel re-enforcement with heavy sledge hammers.

A concrete house, re-enforced, becomes what is called monolithic. It is just as if you chiseled the house out of a single block of stone, with the added strength furnished by the steel. It is a matter for quarrymen to handle to take it down. The suggestion has been made that acids could be used to disintegrate the concrete; but investigation proves that this method would be too expensive. Muriatic acid would dissolve the binder in the cement, but it would only penetrate a short distance before it would be overcome by the acids in the cement, with the result that an enormous amount of the muriatic acid would be required to do a small amount of wrecking. Sawing the building into blocks would be impossible for the reason that the hardest saw steel known could not cut through the steel re-enforcing.

The wrecking of concrete buildings is a matter that architects, builders and inventors would do well to consider. What is wanted is a method of construction that will not impair the value of the present method, yet will enable the building to be wrecked, for the demolition of a building in the long run should be considered part of the

cost of construction.

Sue Depot Builder—Ellensburg Men Find They Cannot File Lien

Ellensburg, Wash.—Several Ellensburg business firms filed suits today against John Halloran, the contractor for the Northern Pacific passenger station at Ellensburg and the Fidelity Deposit Company of Maryland for sums aggregating several thousand dollars due them for labor and material on the passenger station. The Fidelity Deposit Company was on Halloran's bond and is made a party to the suit. The business men say that Halloran was unable to complete the building for the amount of his contract, and that as a result he was unable to pay his bills. He had bad luck with water and through various delays. Finding themselves unable to collect their accounts, the business men attempted to file a lien on the building, but found that in the last lien law passed by the legislature there is a section exempting railroad companies from the provisions of the law whenever the railroad company compels the head contractor to file a "good and sufficient bond.

The business men now find that they have no rights under the lien law and will have to recover their bills by

civil suit against the bonding company.

Stirring Up the Home Spirit

Not for the first time, but repeating in a measure a campaign that has been waged periodically heretofore, the American Lumberman is urging the retail dealers in lumber throughout the country to stir up the home-building spirit, not only in their advertising, but in their talks when they come in contact with people. The idea is an excellent one, because it makes for the creation of new business in a way that brings permanent good to those among whom it is created. There is not a better theme than that of home building, and there is no fault to find with anyone who urges the people of his community to build better homes, even though the direct purpose of it may be to get more business for themselves by supplying the material for the building.

Progress in the Use of Aluminum

Generation Ago Little was Known of Metal-It was Regarded as Curiosity and Sold for \$15 a Pound

A generation ago aluminum was little more than a curiosity. It was worth \$15 or more a pound and its total production in the United States was less than 100 pounds a year, notwithstanding the fact that aluminum is the most abundant of all the metals in the earth's crust, of which aluminum oxide forms about 15 per cent. The great progress made in the industry is noted in the fact that a report on bauxite and aluminum for 1910, by W. C. Phelan, just published by the United States Geological Survey, shows a consumption in the United States in that year of 47,734,-000 pounds, valued at nearly \$12,000,000. The price has thus dropped from \$1 an ounce to about 23 cents a pound.

Mr. Phelan states that although aluminum has in recent years become a most important economic metal, it is at present produced only from bauxite, a comparatively scarce mineral, and that even the great discovery which made this possible is only the first stage of wresting the metal from its various rock and earth combinations. Aluminum is an essential constituent of all important rocks except sandstone and limestone, and is found in all clays. The supply is therefore practically limited, awaiting only the perfection of a process for cheap extraction.

Mr. Phelan mentions a number of recently patented processes which show progress in the cheap extraction of the metal from the common source of supply. As aluminum in its various forms, both pure and as an alloy, possesses many remarkable qualities, it may be welcomed as a coming metal of great utility. Should it become as abundant and cheap a metal as may reasonably be expected, the industry holds boundless possibilities. An alloy called duralumin contains 90 to 95 per cent of aluminum, which at present prices would make it rather expensive, but it is claimed to have qualities as good as Bessemer steel, although it is only about onethird as heavy as iron or brass. It possesses great hardness, even when annealed. Another alloy of aluminum and copper is said to be a good imitation of gold; it polishes readily and takes a high luster and is well adapted to ornamental purposes. It is also highly resistant to chemical action and can be readily machined and rolled and drawn into wire. Aluminum may therefore have a wide future use, ranging from structural material to brooches and hatpins.

Many other important uses of aluminum are mentioned in Mr. Phelan's report, a copy of which may be obtained through application to the director of the Geological Survey, Washington, D. C.

The growth of the aluminum industry in the United States in 1910 is shown in the following table, 1883-1910:

Year.	Pounds.
1883	83
1885	283
1890	61,281
1895	920,000
1900	
1905	(consumption)
1910	(consumption)47,734,000

A Resume

Recent items selected from the Daily Advance Reports of The Pacific Coast Architect.

PORTLAND.

Residence. Architect W. B. Bell prepared plans for 2 story frame residence for Mrs. K. K. Fox, to cost \$6000.

Residence. Architects Goodrich & Goodrich prepared plans

Residence. Architects Goodrich & Goodrich prepared plans for 2 story frame residence to cost \$7000.

Hotel Building. Leonard Construction Co. erecting 2 story store and hotel building for Mrs. E. F. Goode, at a cost of \$5000.

Residence. M. A. Zan erecting 2 story frame residence on Jeffery Avenue to cost \$7500.

Church. Architects Jacobberger & Smith prepared plans for church building to be built in Irvington at a cost of \$10,000.

Flats. Architects Jacobberger & Smith prepared plans for 2 story frame flat building for John Alstadt, to cost \$7500.

Residence. Mautz Building & Investment Co. erecting 2½ story frame residence on East Fourteenth, to cost \$5000.

Office and store building. Architects Doyle, Patterson & Beach are preparing plans for the erection of a 10 story Class A store and office building to be built on the corner of Washington and Fifth streets.

Apartment House. Architect D. B. Flickinger prepared plans

Apartment House. Architect D. B. Flickinger prepared plans pany to cost \$350,000.

Residence. D. W. Zeller erecting 2 story frame residence on Grand avenue, to cost \$5500.

Grand avenue, to cost \$5500.

Residence. Architects Bridges & Webber prepared plans for 2 story frame residence for Dr. Bruce.

Bank Building. Architect George Rae prepared plans for 2 story brick banking building for the Commercial State Bank, at Kelso, Washington, to cost \$15,000.

Church Building. The Latter Day Saints will erect frame church building at East Twenty-fifth and East Madison streets, to cost \$15,000

to cost \$15,000. Residence.

Residence. Architect J. O. Wren prepared plans for 2½ story frame residence for B. Statter.
Residence. B. F. Moore erecting 2 story frame residence

story frame residence for B. Statter.
Residence. B. F. Moore erecting 2 story frame residence on East Fourteenth to cost \$6000.
Residence. Mrs. E. R. Miller erecting 2 story frame residence on Knott street to cost \$5000.
Moving Picture Theater. John Sullivan erecting 1 story brick moving picture theater at 703 Powell street to cost \$5000.
Residence. W. L. Toole erecting 2½ story frame residence on East Washington street to cost \$14,000.
Residence. E. G. Gordon erecting 2 story frame residence on East Davis street to cost \$5600.
Hotel Building. Architects Doyle, Patterson & Beach are for 2 story frame apartment building to cost \$8000.
Business and office building. Architects Reid Brothers, San Francisco and Portland, have prepared plans for a Class A office and business building for the Journal Publishing Compreparing plans for the erection of a 12 story Class A building for the Oregon Hotel.
Residence. E. J. Mautz erecting 2½ story frame residence on East Twenty-second street to cost \$6500.
Factory Building. The Pacific Specialty Co. are erecting a 2 story factory building to cost \$6000.
Bank Building. The Gresham Bank will erect 2 story brick bank building at Fourteenth and Market streets, at a cost of \$15,000.
Business Building. Architects Whidden & Lewis prepared

Business Building. Architects Whidden & Lewis prepared plans for 12 story Class A business building to cost \$350,000.

Residence. J. G. Mack erecting 2 story frame residence to cost \$8000

Residence. J. G. Mack erecting 2 story frame residence to cost \$8000.

Flat Building. C. B. Webb will erect 2 story frame flat building on corner of Brainerd and Rodney streets, to cost \$7500.

Residence. H. Gordon will erect 2½ story frame residence on Belmont street, to cost \$7500.

Apartment House. Mrs. E. F. Goode will erect 4 story apartment house on Sixth and Everett streets, to cost \$60,000.

Residence. B. T. Allyn prepared plans for 2 story frame residence for Joseph Chrudinsky to cost \$7000.

Residence. Architect D. B. Flickinger prepared plans for 10 room frame residence to cost \$8500.

Flat Building. Architect R. N. Hockenberry prepared plans for 2 story frame flat building to cost \$5000.

Residence. Architects Bridges & Webber prepared plans for 1½ story frame residence for H. F. Morrow,

Residence. Architect C. H. Bristow prepared plans for 2 story 8 room residence for O. O. Hall, to cost \$5500.

Apartment Building. Architect Newton C. Gaunt prepared plans for 11 story apartment building for Dr. J. C. Hanslmair, to cost \$350,000.

to cost \$350,000.

Business Building. Architect Fred M. Legg prepared plans for 3 story brick business building for W. and M. E. Bruiman. Residence. Architects Spencer-McCain Co. prepared plans for 2 story frame residence for W. L. Souders, to cost \$5000. Residence. H. M. Fancher & Co. prepared plans for 2 story 9 room frame residence for J. Manassa.

Business Building. Architect H. C. Dittrich prepared plans for 3 story brick business building for William Lind. Residence. Architect Charles W. Henn prepared plans for residence for Mrs. L. S. Carter.

Warehouse. S. L. Brown is erecting a 4 story reinforced concrete warehouse at East First and Madison streets.

Business Building. Architects Doyle, Patterson & Beach prepared plans for a 9 story Class A business building for Woodward-Clarke & Co.

Business Block. P. Schuele & J. M. Wallace are building a 2 story brick business building to cost \$15,000.

Business Building. Architects Williams & Rasmussen prepared plans for 12 story reinforced concrete hotel building, to be built at Twentieth and Everett streets.

be built at Twentieth and Everett streets.

Hotel. Ashland, D. Perozzi and E. T. Staples are building an addition to their hotel to cost \$30,000. Church, Albany. The Presbyterians will crect \$25,000 church

Federal Building, Pendleton. Federal building will be built at a cost of \$125,000

Residence, Eugene. H. Hickson erecting 2 story frame resi-

dence,
Church Building, Wallowa. The Latter Day Saints will erect
frame church building.
Gymnasium, Rainier. Architects Kroner & Henn, Portland,
prepared plans for 2 story frame gymnasium in connection with
the high school, to cost \$5000.
School Building, Monroe. Alpine District No. 26 will erect
2 room school building.
Business Building, Albany. J. S. Magladry and J. W. Shumate will erect 2 story brick business building.
Depot, Roseburg. The Southern Pacific will build a new
\$22,000 depot.

\$22,000 depot.

Postoffice, Albany. A federal building will be erected here. Business Building, Marshfield. W. S. Chandler will erect 5 story brick business building.

SEATTLE.

Apartment House. Architect Robert T. Knipe prepared plans for 4 story addition to apartment house, to cost \$15,000, Business Building. Engineers Weld & Thomas prepared plans for 6 story reinforced concrete building for Diamond Ice Company, to cost \$100,000.

Office Building. Architects Howells & Stokes prepared plans for 11 story steel and concrete office building for the Cobb-Healy Investment Co., to cost \$500,000.

County Building. The County Commissioners will erect a \$50,000 building, corner of Fourth avenue and James street. Bank Building. Oriental-American Bank will erect 2 story brick and concrete building to cost \$25,000.

Business Building. Architect W. B. Van Siclen prepared plans for business building to cost \$50,000.

Hotel Building. Architects Bebb & Mendel commissioned to draw plans for hotel for the Milwaukee Road at Rainier National Park, to cost \$500,000.

Office Building. Architects Bebb & Mendel prepared plans for 9 story concrete and steel office building.

Business Building. Architect J. G. Johnson prepared plans for 3 story brick store and apartment building, to cost \$30,000.

Sanitarium. Architect C. F. Hermann prepared plans for a sanitarium to be built at Lake Crescent, to cost \$50,000.

SPOKANE.

Apartment Building. Architects Jones & Levesque prepared plans for apartment building for E. L. Rice, to cost \$30,000.

Business Building. Mrs. Sarah Inman will erect 2 story brick and concrete building to cost \$30,000.

Apartment Building. Jones & Levesque prepared plans for 5 story brick apartment building for Foster & Wachtman.

City Hall. Architect Julius Zittel is preparing plans for the erection of a steel and concrete 8 story city hall building.

Apartment Building. S. W. True will erect 2 story frame apartment to cost \$8000.

Addition Hotel. Ridpath Hotel will erect 1 story brick addition at a cost of \$10,000.

Cold Storage Warehouse. John Morrell & Co. will erect a

\$20,000 cold storage warehouse

WASHINGTON.

Office Building, Sumas. The Sumas State Bank will erect 2 story brick office building.
Store and Flat Building, Tacoma. Architects Bullard & Hill prepared plans for store and flat building for Hill & Crawford. Church Building, Colfax. Architect Alpheus Dudley, Seattle, prepared plans for Congregational Church building, to cost \$12,000

Freight Shed, Aberdeen. The O.-W. R. & N. will erect

Freight Shed, Aberdeen. The U.-W. R. & N. win erect freight shed to cost \$15,000. School Building, Oakland. Architects Heath and Gove are preparing plans for 8 room school house.

Church Building, Walla Walla. Architect U. Grant Fay prepared plans for steel and brick church building, to cost \$50,000. Garage, Ellensburg. Bert Gartin will erect 2 story reinforced

concrete garage, to cost \$15,000.

Court House, Pasco. Architect C. Lewis Wilson, of Seattle, prepared plans for County Court House to cost \$100,000.

BRITISH COLUMBIA.

Apartent House, Vancouver. George Simons will erect re-inforced concrete apartment building, to cost \$36,000. Store Building, Victoria. D. Ker will erect store building

to cost \$40,000.

to cost \$40,000.

Addition School Building, Vancouver. An addition to the King Edward School will be built at a cost of \$130,000.

Business Building, Victoria. Thomas R. Cusack will erect 2 story brick business building to cost \$10,000.

Convent, Vancouver. The Madams of the Sacred Heart will erect a convent at Point Grey at a cost of \$300,000.

City Hall, Prince Rupert. Architects Potter & Lailey prepared plans for a city hall to cost \$20,000.

Office Building, Victoria. Architect Jesse M. Warren prepared plans for 6 story reinforced concrete office building to cost \$125,000. \$125,000.

Business Building, Victoria. Kirkham Grocery Co. will erect

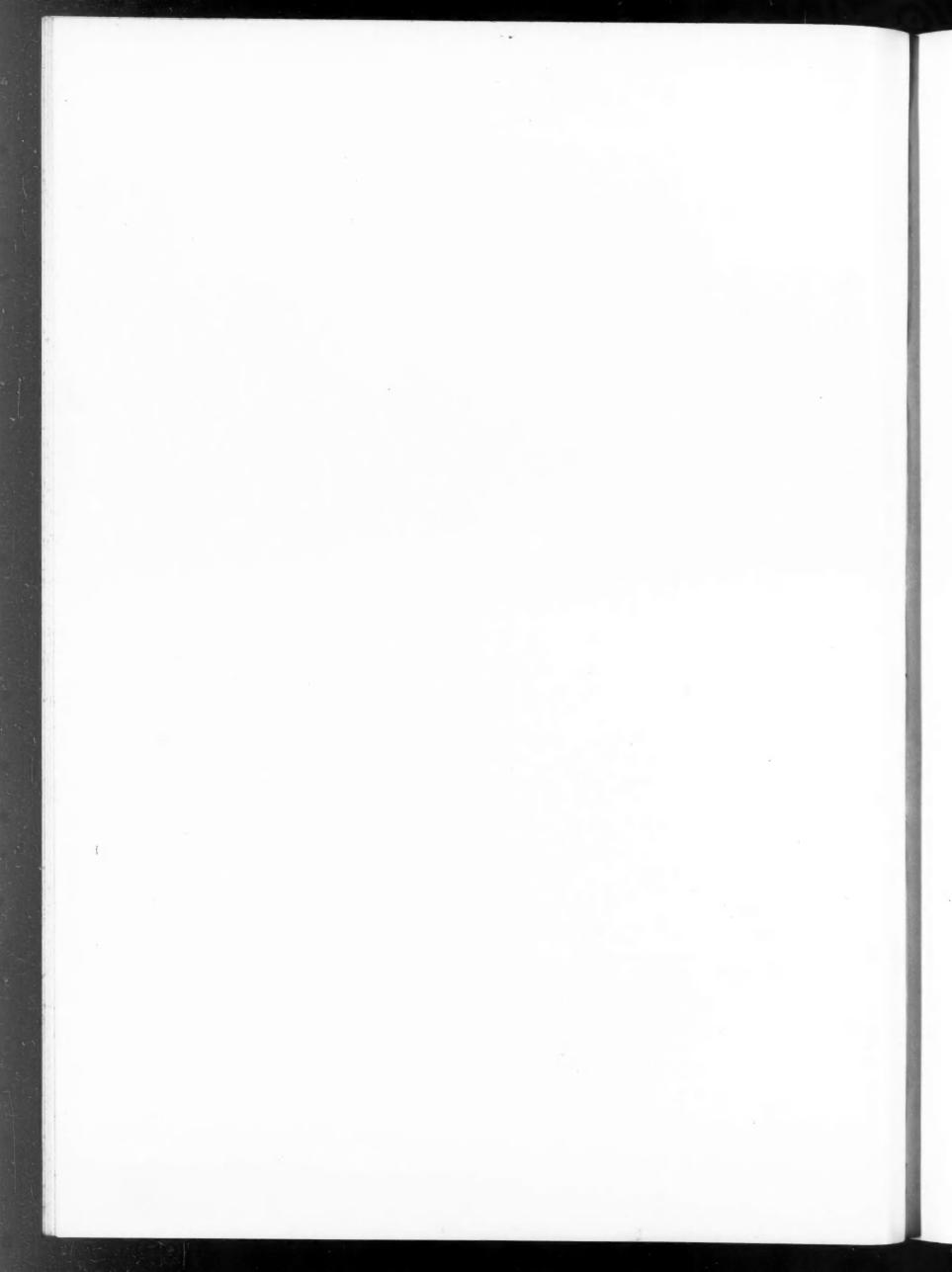
3 story brick business building to cost \$20,000. Prison Structures, Burnaby. The Government will construct prison buildings at a cost of \$500,000.

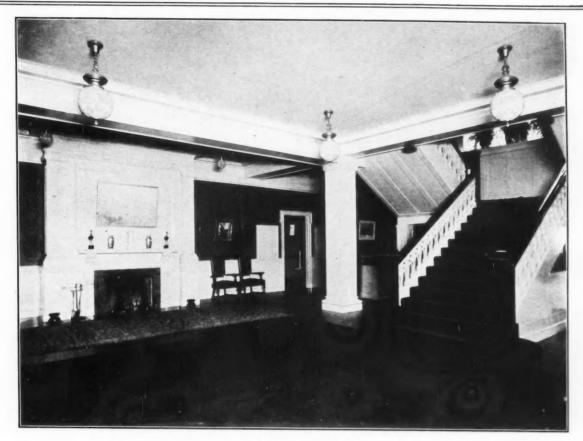
Poor Concrete Causes Trouble at St. Paul

Building Inspector Van Ornum of St. Paul, Minn., has taken a shot at cement foundations under wall dwellings not as such, but because his forces have been finding walls put in by careless contractors which are sadly under the requirements. The ordinance requires concrete foundation walls shall be composed of one part of cement to three of sand and six of broken rock or gravel, but it has been found quite frequently that a mix of one of cement, seven or eight The inspector of sand and one of gravel had to answer. considers this sort of a wall unsafe, and will condemn any such that he may find. This is but another instance of how uncertain the concrete proposition may be in the hands of a reckless or thrifty contractor. Foundation walls of concrete are presumed to be all right, but they will not submit to having the concrete skinned out of the job and then produce a wall that will do good work. With such an uncertain line as a mixture of the character named would give, would be almost certain to allow unequal stress through a dwelling, causing settlement cracks to show in the plaster, throw doors out of line and twist fin shing work to the general discredit of the work. A built-in sideboard which happened to rest over an especially weak place in the foundation wall, unless the supporting timbers or frame were strong enough to carry the strain, which they should not be required to do, might easily be sagged and strained, its mirror cracked and otherwise thrown out of true.

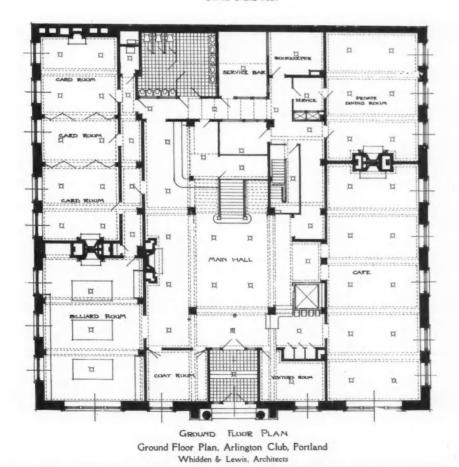


Elevation, Arlington Club, Portland Whidden & Lewis, Architects

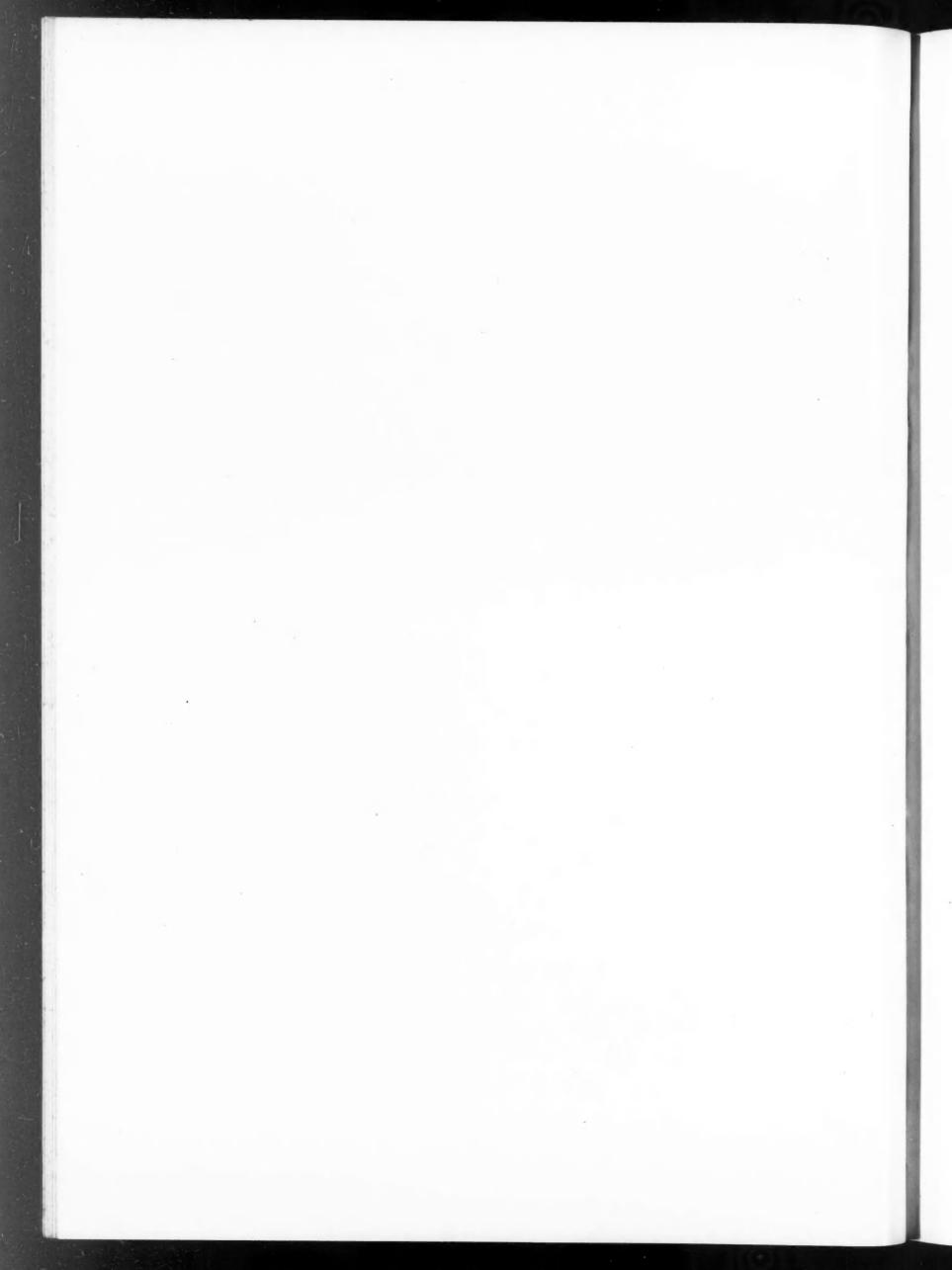




Main Lobby, Arlington Club, Portland Whidden & Lewis, Architects



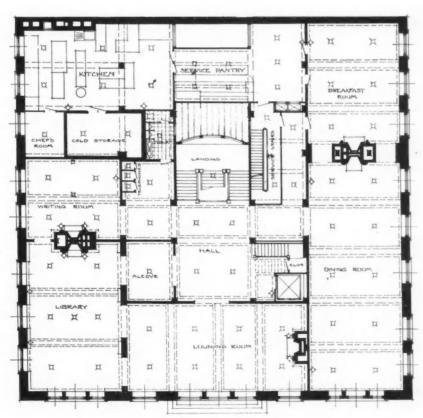
PACIFIC COAST ARCHITECT OCTOBER, 1911





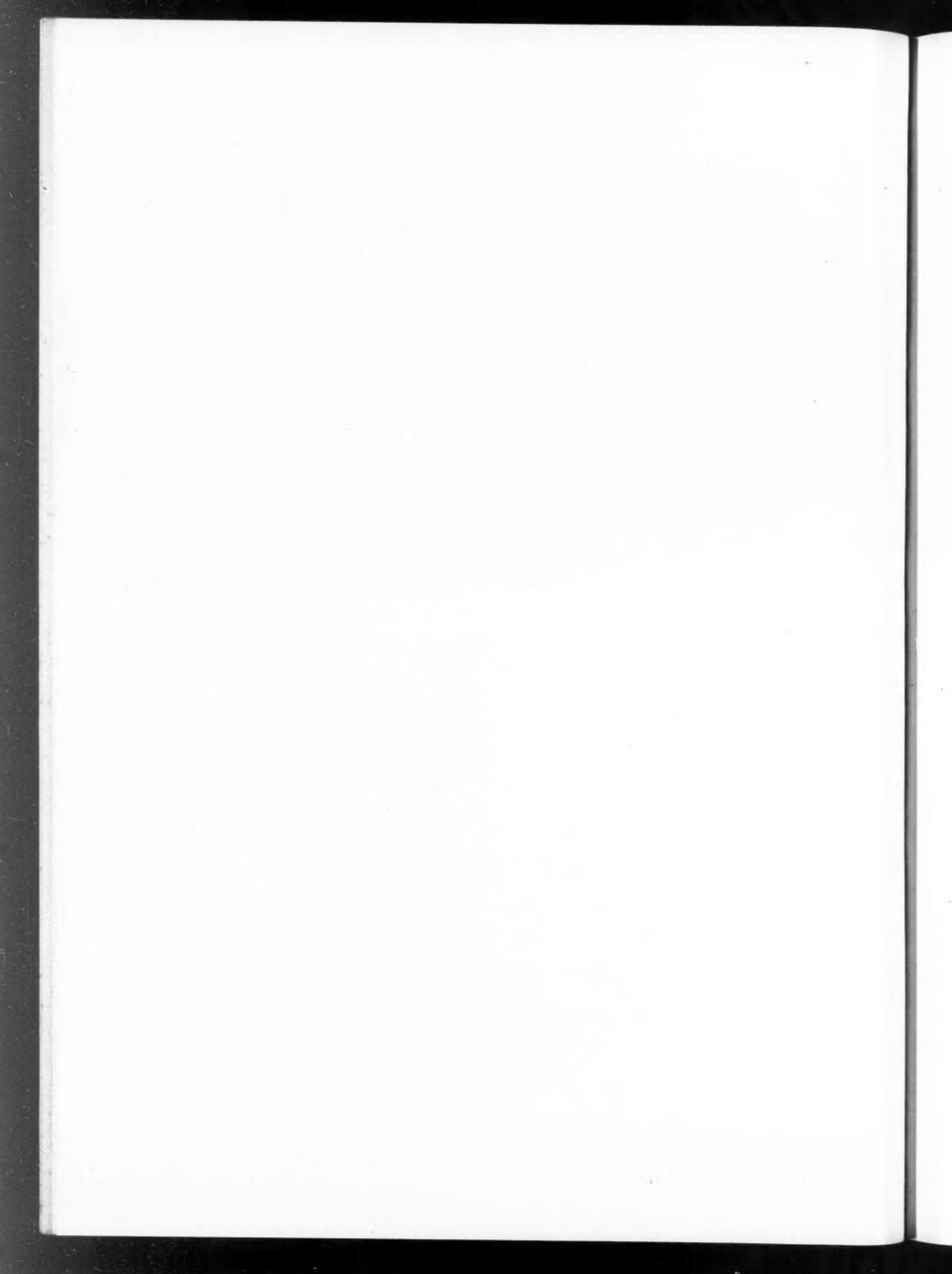
Library, Arlington Club, Portland Whidden & Lewis, Architects

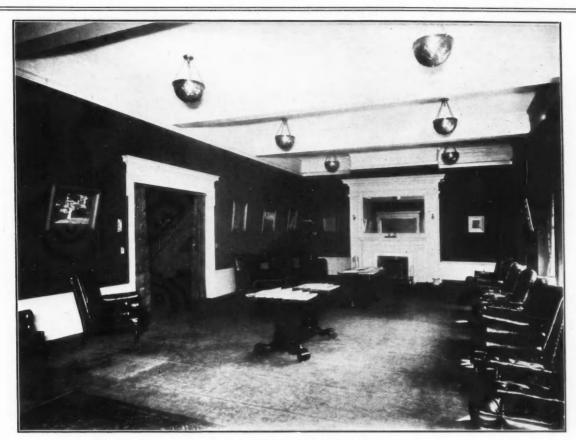
SCALE FOOT



FIRST FLOOR PLAN

Second Floor Plan, Arlington Club, Portland Whidden & Lewis, Architects



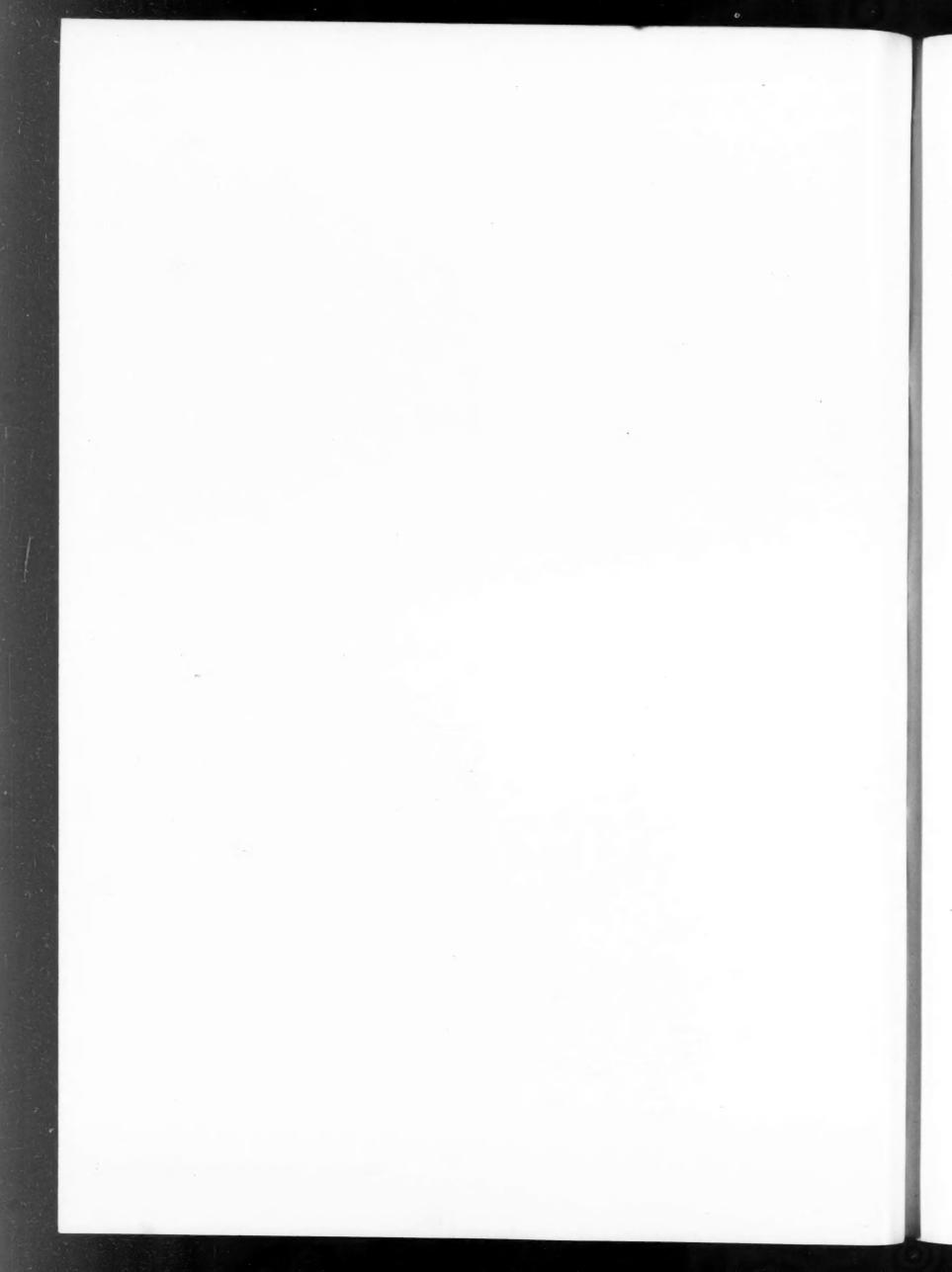


Lounging Room, Arlington Club, Portland Whidden & Lewis, Architects

SCALE: 5 - ONE BOOM

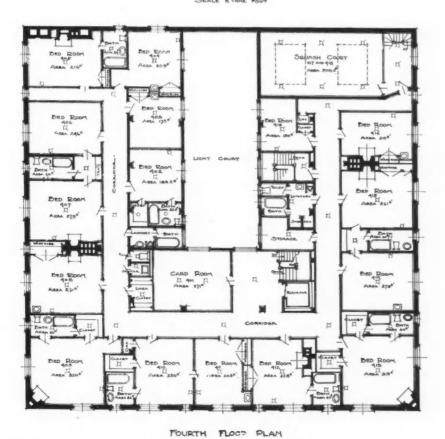


THIRD FLOOR PLAM
Third Floor Plan, Arlington Club, Portland
Whidden & Lewis, Architects

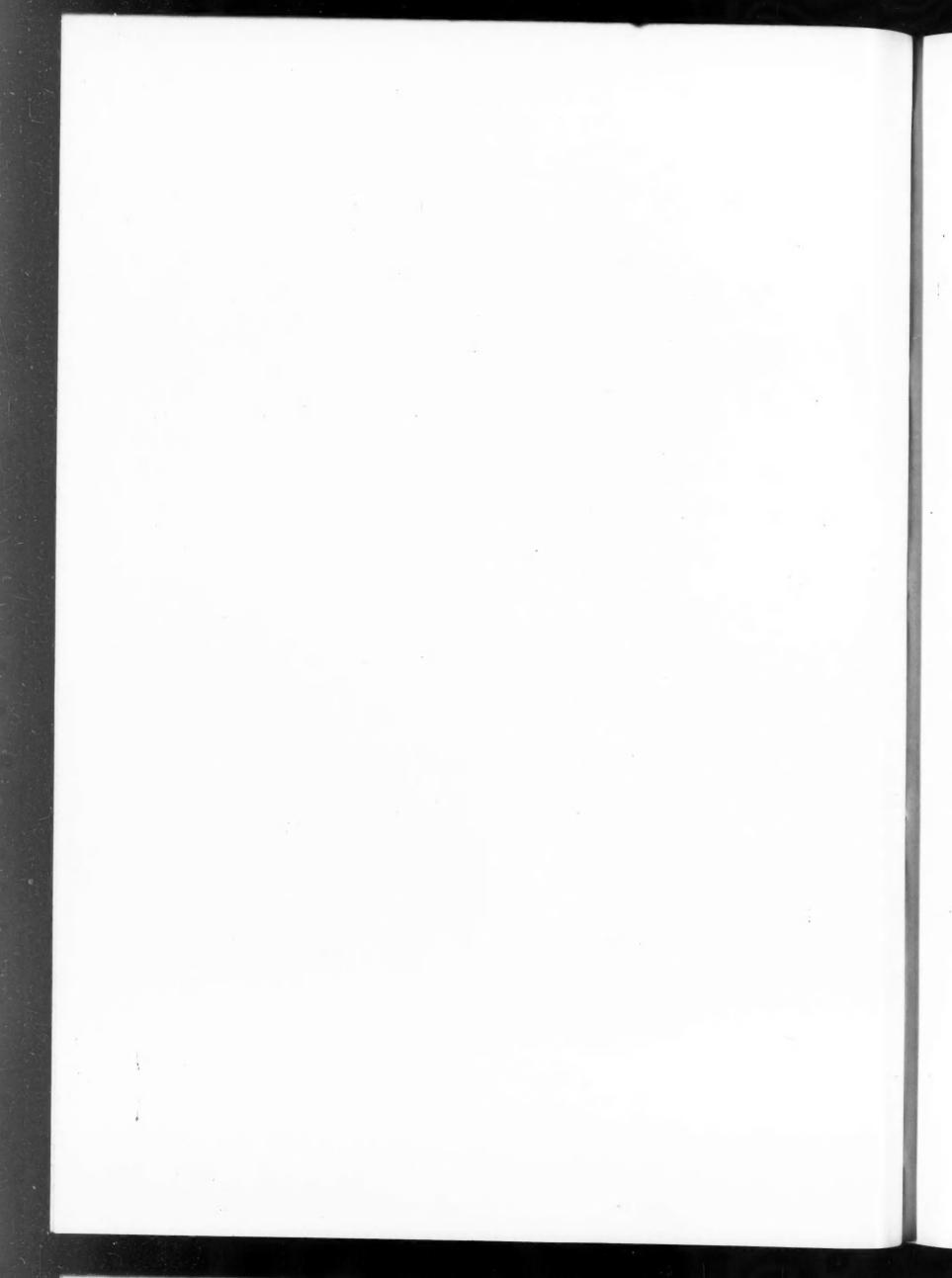




Writing Room, Arlington Club, Portland Whidden & Lewis, Architects

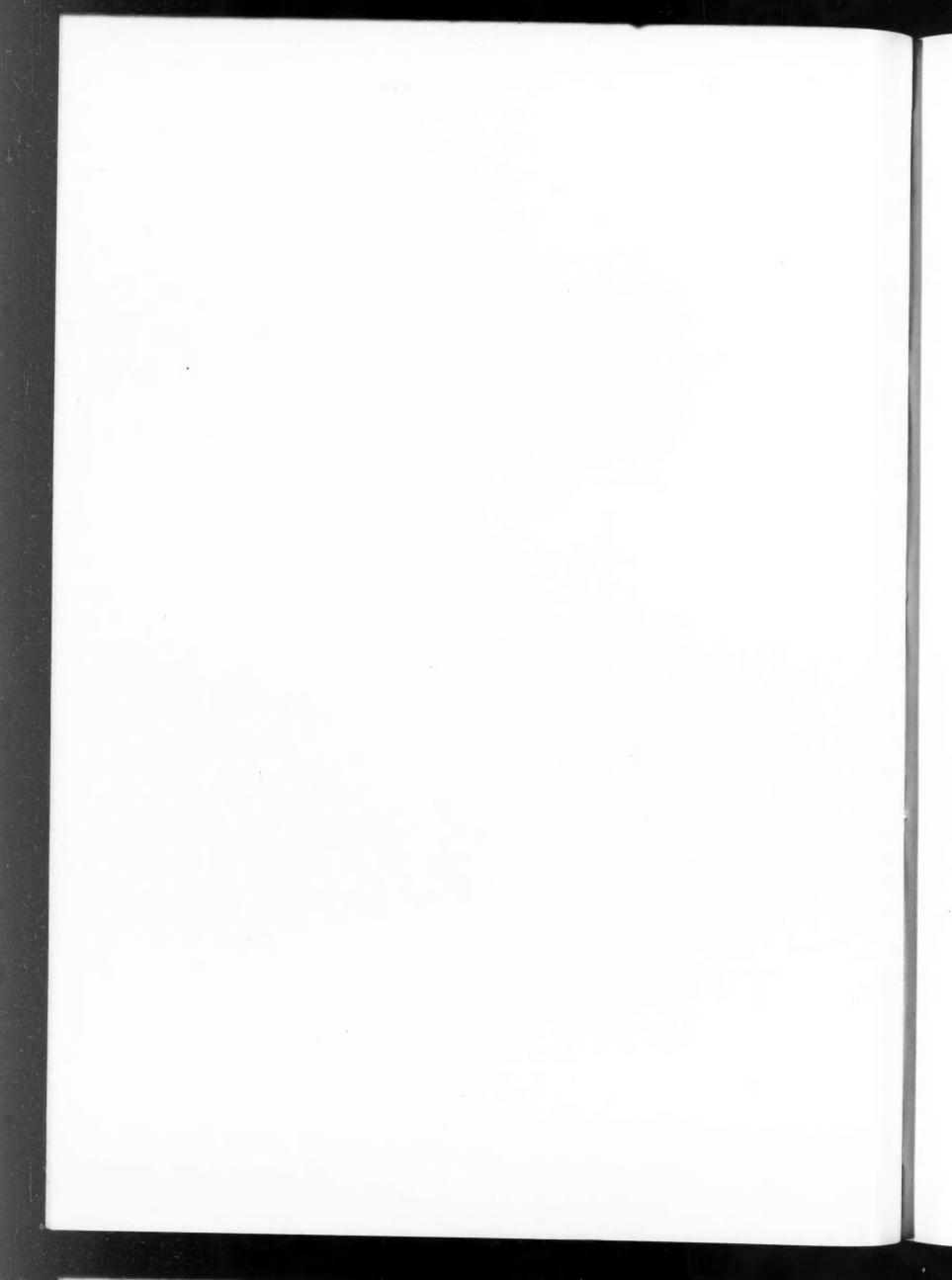


Fourth Floor Plan, Arlington Club, Portland
Whidden & Lewis, Architects



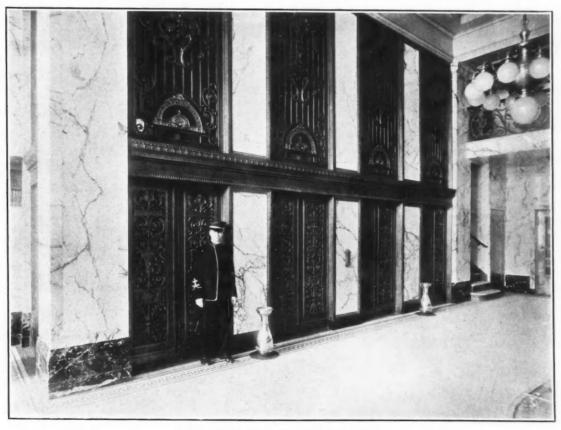


Elevation, Yeon Building, Portland Reid Brothers, San Francisco and Portland, Architects





Detail, Upper Floors, Yeon Building, Portland Reid Brothers, San Francisco and Portland, Architects

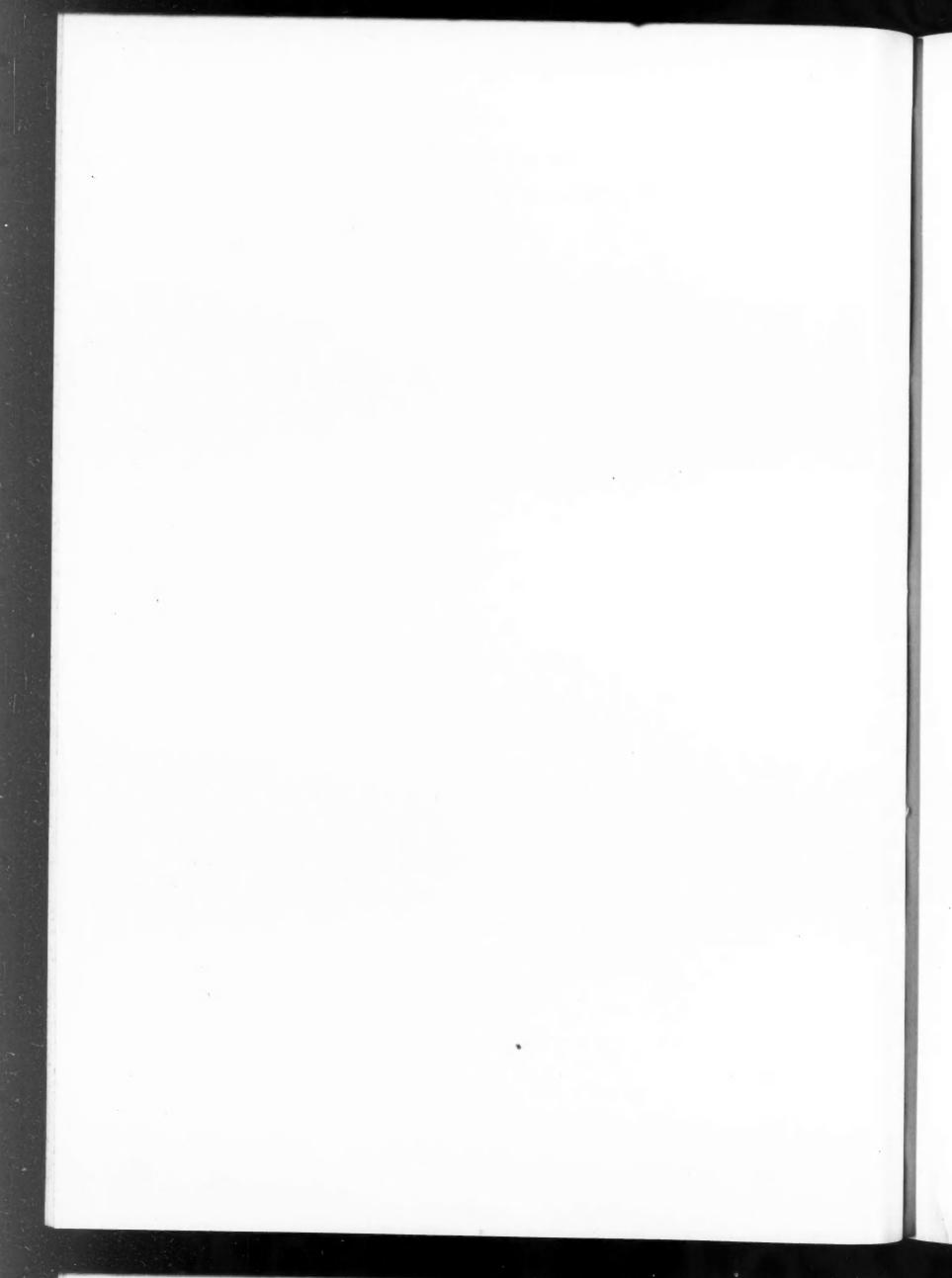


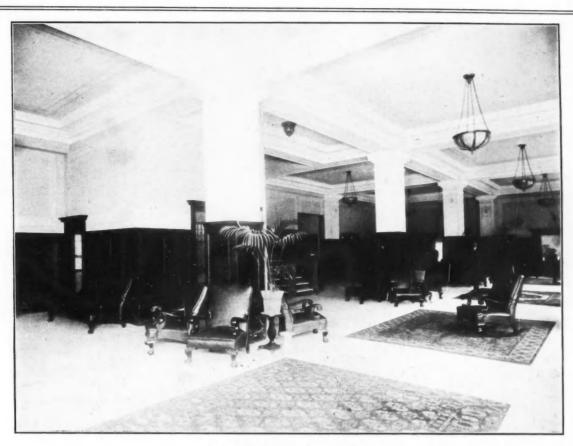
Entrance to Elevators, Yeon Building, Portland Reid Brothers, San Francisco and Portland, Architects



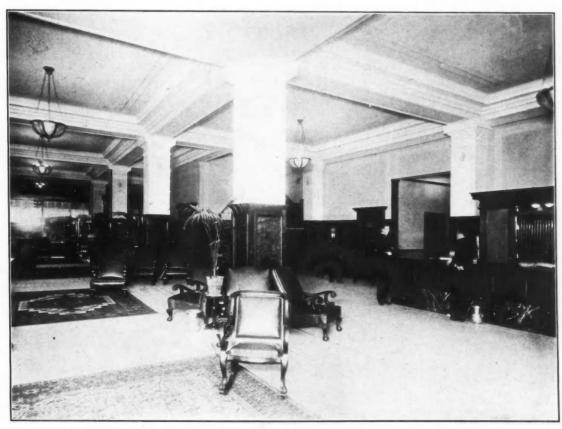


Elevation, Carlton Hotel, Portland MacNaughton & Raymond, Architects

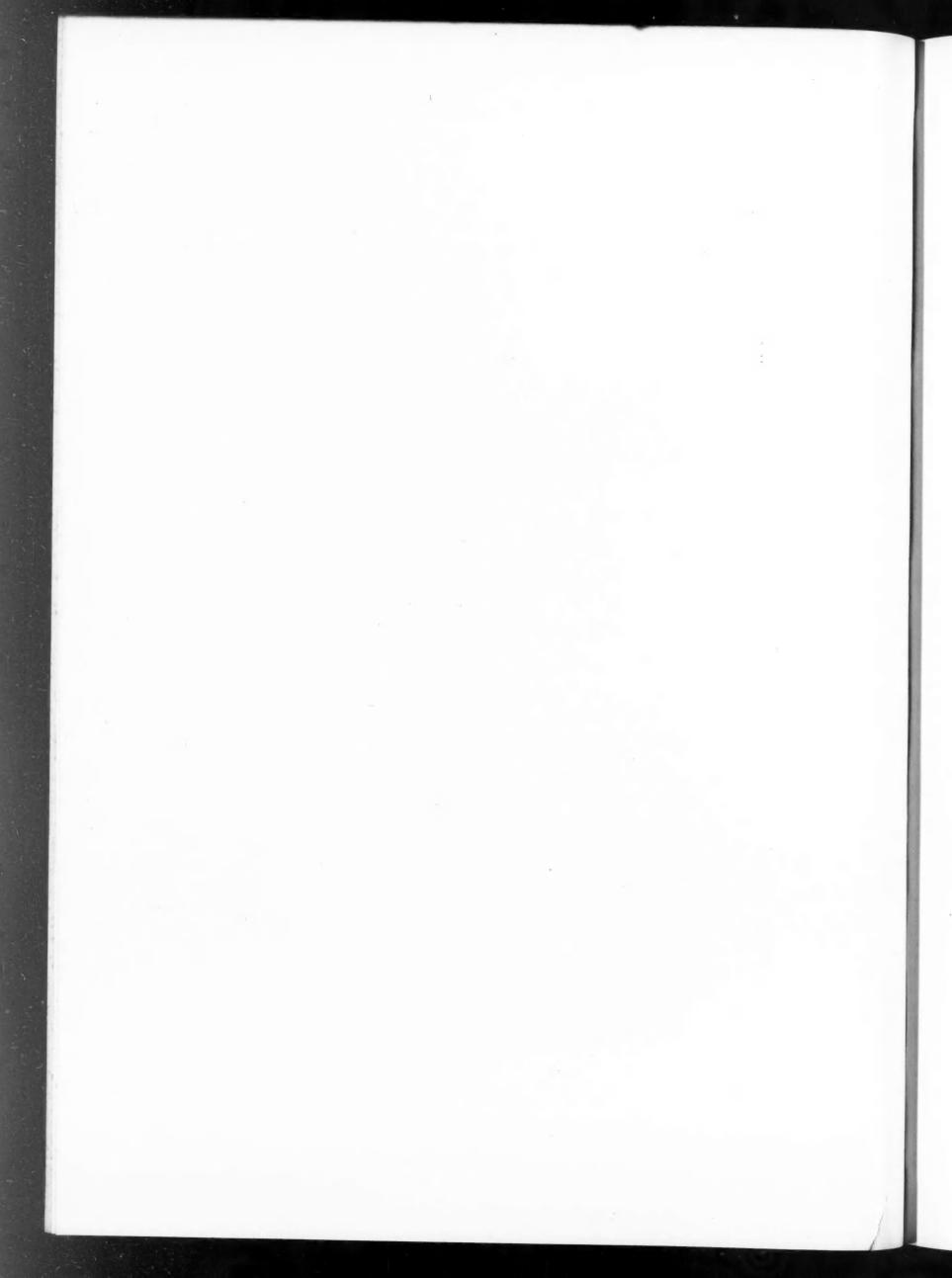




Part of Lobby, Carlton Hotel, Portland MacNaughton & Raymond, Architects



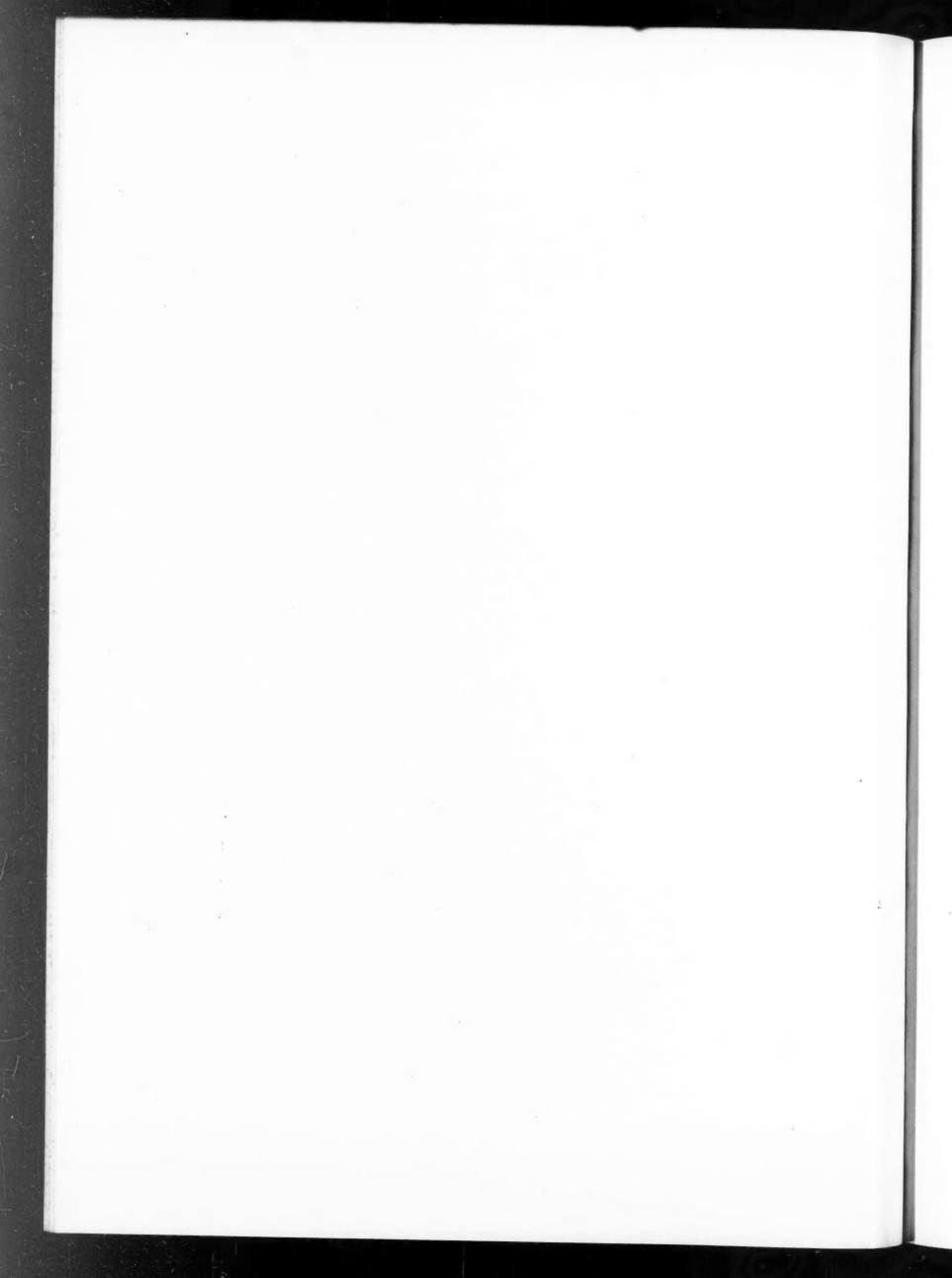
Part of Lobby, Carlton Hotel, Portland MacNaughton & Raymond, Architects





PACIFIC COAST ARCHITECT OCTOBER, 1911

Elevation, Journal Building, Portland Reid Brothers, San Francisco and Portland, Architects



Trade Notes

A. G. Whiteman, of the Oregon Art Tile Co., has returned from Medford, where the company has just completed the tile work in the Hotel Holland. The hotel contains 29 bathrooms and a large lobby, making a total of 3000 square feet.

The Columbia Elevator Company is busy installing their latest improved automatic electric dumb waiter in a number of modern apartment houses. This invention is the last word in dumb waiters and is meeting with considerable success

The Newberg Brick & Tile Company furnished their "Newberg Red" for the Arlington Club.

It is rumored that C. C. Smith, sales manager of the Western Clay Co., is spending considerable of his time in Vancouver, Washington. We sincerely trust we are not going to lose the affable gentleman as a resident of Portland.

The Harris Ice Machine Works make a specialty of installing high grade refrigerating plants for hospitals, hotels, clubs and office buildings.

S. B. Cooke, of the Holmes Disappearing Bed Co., has returned from a six weeks' tour of the Canadian and Middle Western branches of the company. Mr. Cooke reports excellent business at all the agencies visited.

The Portland Bar Fixture Co., organized last July, has installed the complete bar outfit for J. A. Waddle, Second and Morrison streets. The fixtures are handsomely finished in dark green. This is the first outfit turned out by the new company and reflects well on their ability. They are also installing a complete outfit in the Raleigh Building for Louis Trummer & Co., and in the same building are fitting up a buffet for Steve Stephenson. They are also installing a new 50-foot counter and a 14-foot extension on the back bar for Peterson & Olson at First and Burnside streets.

Nitschke & Andrae have completed the ornamental plaster and stucco work on the People's Amusement Company's new building, West Park and Alder streets, and will do the ornamental plaster and stucco work on the Lents, Glencoe and Mt. Tabor schools. They have also completed the contract on the People's Amusement Company's building at Medford, Oregon.

The Portland Hardwood Floor Company laid the hardwood floors in the Arlington Club.

The Western Refining Company is now manufacturing

The Western Refining Company is now manufacturing the Beaver Brand house paints in all colors. The company reports a large shipment of machinery, which will be installed in their plant.

Olson & Co. has installed a dozen built-in refrigerators in the building of the McKenzie Realty Company at Alameda Park.

W. P. Fuller & Co. are completing the glazing for the Multnomah Hotel.

The Portland Sheet Metal Works did the roofing, sheet metal work, skylight and metal windows in the Arlington Club building, also furnished the underwriters' windows in the North Pacific College.

Parties are now negotiating with the Shope Concrete Products Company for the establishment of a plant at Aberdeen, Washington, for the purpose of manufacturing the Shope waterproof brick, which is meeting with much favor among the Portland trade.

The Pacific Lumber & Mfg. Co. has received a cargo of 1,700,000 feet of oak from Otaru, Japan.

The Morrison Electric Company has moved from 291 E. Morrison street to 351-353 E. Burnside street.

O. E. Heintz, president of the Pacific Iron Works, reports that the season just closed has been an exceptionally busy one. The shipment of material to points in Oregon, Washington and Idaho has been unusually large.

The Public Engineering Company is completing the installation of a sewage and garbage disposal plant at El Paso, Texas, which will cost \$100,000.

The Western Clay Company has issued a handsome, loose-leaf, leather-bound album, showing photographs of buildings in which their brick has been used. The illustrations include business buildings, apartment buildings and many beautiful residences.

The P. L. Cherry Company announces that it has been appointed selling agents for the Newberg Face and Common Brick.

The Portland Iron & Wire Works has installed all the ornamental iron work in the North Pacific College, Oregon and East Sixth streets.

Gladding, McBean & Company, of San Francisco, furnished the terra cotta used in the Yeon Building.

The Portland Sand Co. is furnishing the sand and gravel for the new cement mills now in course of construction at Oswego, Oregon. They secured the contract following a test which proved their sand and gravel to be the best that could be obtained.

The Portland Tile & Mantel Co. has completed the tile work in the Northwest Building, corner Sixth and Washington streets. The firm recently established a record by laying over 500 square feet for the Friedman Clothing Co. between 10 P. M. Saturday and 10 P. M. Sunday. They also laid the tile in the bath room, sun parlor, vestibule floors and tile mantels in George A. Sear's residence.

The Columbia Elevator Co. installed three electric and one hydraulic dumb waiter in the Arlington Club. The electric dumb waiter installed in the Carlton Hotel, and running between the kitchen and dining room, makes about 600 trips each day.

The Denny-Renton Clay & Coal Co. has had to enlarge its plant to take care of the greatly increased business.

The Morrison Electric Co. is now in its new home at 351-353 E. Burnside, with an exceptionally fine line of high class lighting fixtures. Among the recently completed work are the fixtures installed in the Carlton Hotel, Simon Apartments, Haak-Burke Building, Smith Hotel, St. Josephs Hospital, Vancouver, and the residences of A. C. Potter, J. G. Mack, L. E. Kerns, Harry MacCormack and W. C. Bristol.

Watsonite flooring is a thing of the past. The Watsonite Floor & Roof Company, of Seattle, has gone into bank-runtey

J. C. Bayer installed the skylights and underwriters' windows in the Yeon Building, roofing, skylights and ventilating system in the Multnomah Hotel, sheet metal work and fireproof windows in the Hotel Cook, Third and Main streets, and the fireproof windows in the Smith Building. Sixth and Main streets.

The Oregon Art Tile Company has the contract for the tile work in the Sisters' Hospital, being erected at Medford, Oregon.

The Newberg Brick & Tile Company has installed an oil burner system in their factory at Newberg, which will be in operation the first of the month.

The Western Clay Company has been remodeling and enlarging its offices in the Beck Building.

The Lithic Mfg. Co. did the Scagliola in the lobby and laid the Racolith flooring in the baths of the Fritz Apartments, also the Scagliola, altar, sanctuary rails and wainscoting in the St. Thomas Church at Couer d'Alene, Idaho.

J. D. Tresham Mfg. Company has opened a factory at 220-222 Grand avenue, where they will manufacture interior and exterior ornaments in staff, plaster relief, cement, Caen stone and Keene cement. They will also do modeling

and carving. C. W. Heal is in charge.

J. C. Bayer is local representative for Gladding, McBean

& Co.

The Oregon Hardware Company is now in its new quarters in the Worcester Building, where they will be pleased to greet their friends, both old and new.

The Spady Manufacturing Co. installed the show windows and fixtures in the new store of the Knight Shoe Company, Seventh and Morrison streets, and the interior finish and show windows in the Selling Building for Pallay & Worhas.

The tiling in the seventy-four bath rooms and lobby of the Carlton Hotel was laid by the Oregon Art Tile Co. lobby, which covers an area of 4000 square feet, is the largest of its kind in the city. The tile is cream colored and is interspersed at irregular intervals with white dots, the double border being laid off in panels to correspond with The whole effect is pretty and extremely the ceiling.

The Clark-Kelly Manufacturing Company, manufacturers of store, bank and office fixtures of special design, is a new local industry. The company is equipped to do work for the most particular.

The Lithocrete Company has the contract for laying the floors at the New Scott Hotel, Dallas, Oregon.

Spokane Cement Show

A cement products exposition is proposed for Spokane. to be held some time during the coming winter, under the auspices of the Northwest Concrete Institute.

Every use of Portland cement will be illustrated, and the cost of concrete construction as compared with all other kinds of materials will be graphically shown. Interesting and instructive lectures will be given by experts on the use

The exhibition will probably be held in the armory, and there will be exhibits of all kinds of artificial stone, including art work, irrigation and drainage tile, sewer pipe, building blocks, street paving and reinforced concrete, as used both in building operations and in bridge construction.

There will be also a large variety of cement working

tools and concrete mixers and other machinery

The exposition will be the first public affair to be given by the Northwest Concrete Institute, an organization perfected by the leading contractors and engineers of Spokane, who are interested in the cement industry. The object of the institute is to spread correct information concerning the use of this modern building material, and to encourage the erection of permanent, safe and fireproof construction in all buildings undertaken in the Greater Northwest in the future.

An Embryo Architect

A popular conception of the architect's failing in completing a house within the estimate is illustrated in the story of the proud father who thought he discerned great

architectural talent in his six-year-old son.

"Why," asked a neighbor, "does he draw well?"

"No," replied the father, "but he started a few days ago to build a hencoop at an estimated cost of sixty-five cents, and it has already cost me about three dollars and a half."

The Kahn System

The Yeon Building and the Carlton Hotel, illustrated in the current issue, were constructed according to the Kahn system of reinforced concrete, and are striking examples of this method of construction in Portland and the Northwest, to say nothing of the several hundred buildings of the same construction in California.

The principal feature of the Kahn system is, of course, the Trussed Bar, with its rigidly attached shear members, giving additional strength to construction, but the Kahn products today number many articles. The Hy-Rib is extensively used for solid partitions and many lines of work. The various grades of lath, rib metal, column hooping, steel sash and concrete chemical products are nearly as well known as the Trussed Bar. The company has just opened a warehouse at 147 Front street, Portland, and from it goods will be distributed to all parts of the Northwest. In a few weeks the stock of Trus-Con joist hangers will be complete. These hangers have been in vogue in the East for many years and have demonstrated that they are the strongest manufactured. Now the Coast architects are to have the benefit of these superior hangers, as a full stock will be carried in Portland.

Many of the concrete buildings erected in Portland during the past seven years have contained some of the Kahn system products and some of them are Kahn system from top to bottom. Among notable examples are the Electric Building, Carlton Hotel, La Salle Hotel, Burke-Haak Building, White Garage, Packard Garage, East Side Garage, Lewis Building, Beck Building, Oregon Hotel Annex, Crane & Company Warehouse, Cudahy Packing Company, Couch Building and a number of other structures. state the Kahn system has been used in numerous buildings and bridges. Among the buildings recently completed is the First National Bank at The Dalles. Among the several buildings now under construction are the Wasco Mills at The Dalles, the Mt. Tabor and Rose City Park Schools, the Beall Building and the Mulkey Apartments of Portland and the engineers are designing four other buildings to be constructed in Portland next year.

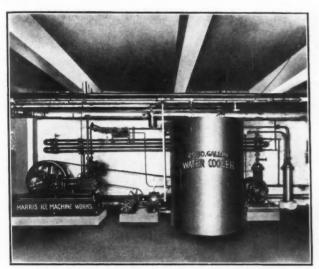
The company, in addition to just opening a warehouse in Portland, maintains a corps of engineers whose services are always at the disposal of architects without charge. The office in Portland is in charge of J. A. Currey as manager. The chief engineer is W. E. Lambert and his chief assistant is H. M. Boyajohn. The warehouse, just opened, while under the direction of Mr. Currey, will be in charge of E. R. Pelton, who has just come from the office of the company in Detroit. The offices will be moved from the Board of Trade Building to 1105-1106-1107 Wilcox Building on November 1.

Oak Flooring Idea

There is a new idea in oak flooring. In narrow strips this flooring has made great progress for several years now. The latest idea is to take these small units and fasten them together at the flooring plant, making them into broad boards, to facilitate laying. It is thought that this new idea will make oak flooring appeal more forcibly to the carpenters and builders, as the one objection they have urged against it has been the tediousness of laying and nailing it in small units.

Consideration of Tenants

All landlords are not considerate of the comfort and welfare of their tenants. It is the rule rather than the exception for owners of large office buildings to force the tenants to accept just what it may be their pleasure to give them as compensation for the monthly rent. To the renter and his employes, confined possibly in a small office which may be located on the sunny side of the building, some consideration for their personal comfort is due.



Water Cooling Plant Installed in the Yeon Building
By the Harris Ice Machine Works

The owners of the Yeon Building, having the comfort as well as the convenience of their tenants at heart, have recently had installed a 2000-gallon water cooling plant by the Harris Ice Machine Works, 174 East Water street. The plant is giving excellent satisfaction and is one of the many installed in the largest hotels and office buildings west of the Rockies. With the multiplicity of office buildings being erected, the renter may soon have the privilege of demanding more than square feet and elevator service for his monthly rent.

Spokane Architectural Club

The first of a series of lectures on "The Achievements in the Field of Architecture" was delivered on the evening of October 17 by K. K. Cutter, on the subject, "Well-Designed Home and Grounds."

The lectures are given under the auspices of the Spokane Architectural Club. The dates of the other lectures and subjects are as follows:

October 17—"Architecturally Designed Engineering Structures," City Engineer Morton Macartney.

October 31—"A Well Planned Modern City," Ernest V Price.

November 14—"The Architect's Relation to His Client." H. C. Whitehouse.

November 28—"Interior Decoration," C. Ferris White. December 12—"Church Architecture," R. C. Sweatt. December 26—"Architecture in Venice," J. M. Good-

January 9—"Training for the Profession of Architecture," W. F. Dolke, Jr.

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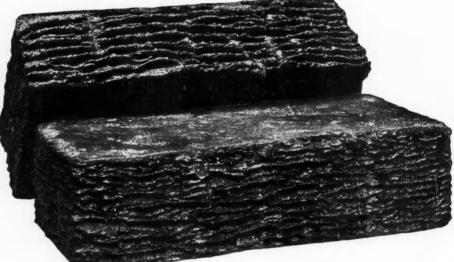
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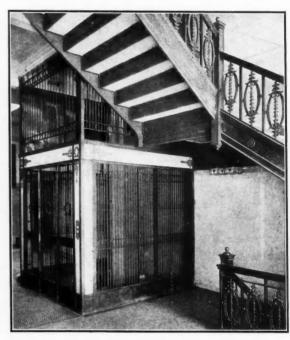
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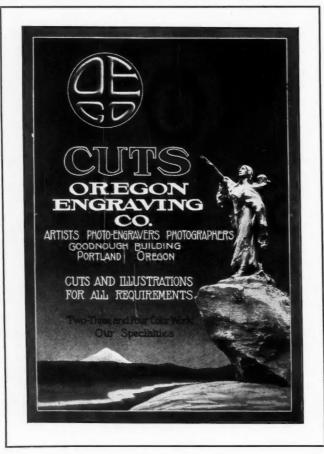
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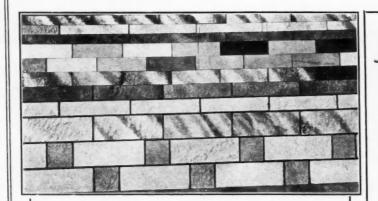
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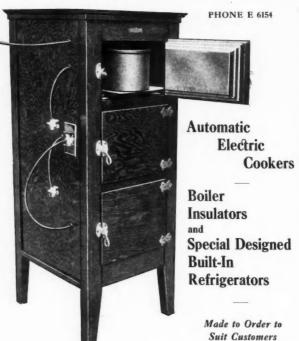
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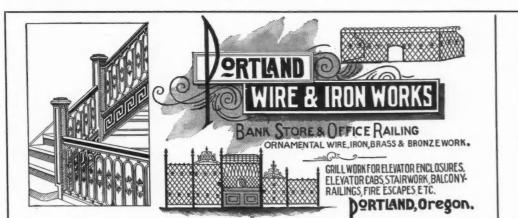
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